

e-learning module
Questionnaire
Course code BOT 507
Ecology and Phytogeography

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Define

- What is ecology, who coined the term ecology?
- •What is a population?
- Define Autecology?
- What is synecology? Who gave the term?
- Define Net Primary Productivity.

MCQs

1. Which of the following statements holds true or false for a population:

- A. Birth rate may be zero or positive
- B. Growth rate may be negative, zero or positive
 - I. Only A & C are true and B is false
 - II. Only C is true & a, B are false
 - III. A & B are true and C is false
 - IV. A, B & C are false

2. Which one of the following options is correct?

- A. In pond ecosystem pyramid of number is inverted.
- B. In pond ecosystem pyramid of biomass is inverted.
 - I. Only A is true
 - II. Only B is true
 - III. Both A and B are true
 - IV. Both A and B are false

Answer in detail

- 1. Briefly explain 'Structure of an ecosystem'.
- 2. What is population density, differentiate between crude and ecological density?
- 3. Explain relative abundance of a population?
- 4. In which of the following category would you place "humans" primary, secondary or tertiary consumers and why?
- 5. Compare Single channel and Two channel Energy Flow models for an ecosystem. Which model is more realistic and why?

Give answers in short

- 1. Ecological efficiency and its types
- 2. Significance of P/R ratio in a community
- 3. Types of succession
- 4. Models of succession
- 5. Theories of succession
- 6. Simpson's index
- 7. Aggregation and Allee's principle

Answer in short

- 1. Age structure and distribution in different population.
- 2. Threatened and endangered species and their conservation strategy
- 3. Density dependent controls in a population
- 4. Energetics of succession in seral an climax communities
- 5. Age distribution and age pyramids
- 6. Principals of remote sensing and its applications
- 7. Air pollution and its effect